

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-100208

(43)Date of publication of application : 05.04.2002

(51)Int.Cl.

F21S 8/08
 A01G 9/00
 A01G 9/02
 A01G 27/00
 // F21W131:109

(21)Application number : 2000-288684

(71)Applicant : ITO TAKAMI

(22)Date of filing : 22.09.2000

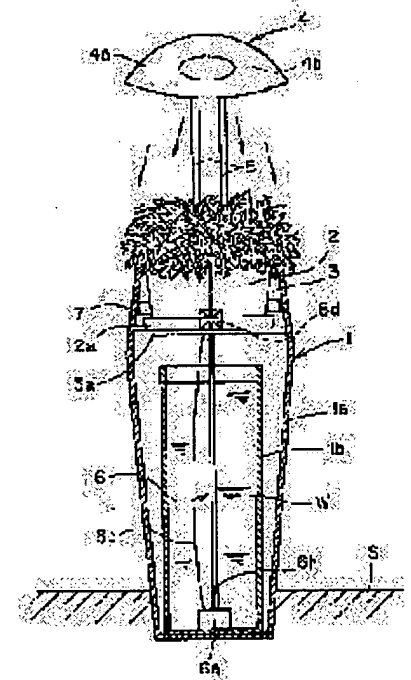
(72)Inventor : ITO TAKAMI

(54) EXTERIOR ILLUMINATION

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an exterior illumination capable of performing not only the primary function of an exterior illumination, but also of enhancing the beauty of the street or a garden at night.

SOLUTION: This exterior illumination comprises a reservoir part 1 for pouring water equipped on its upper part with a housing part 3 for a flower pot 2, an illumination apparatus 4 disposed above the reservoir part 1, and somewhat long fixing and connecting members 5 that fixedly connect the reservoir part 1 and the illumination apparatus 4 with sufficient spacing therebetween, and is so constituted that provision of the sufficient space between the reservoir part 1 and the illumination apparatus 4 makes it possible to clearly show the illuminated flower pot 2.



LEGAL STATUS

[Date of request for examination] 08.11.2000

[Date of sending the examiner's decision of rejection] 07.07.2004

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

DERWENT-ACC-NO: 2002-466509

DERWENT-WEEK: 200250

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TITLE: Outdoor lamp e.g. street lamp, garden lamp,
has
luminaire arranged to top side of water storage
and
installed upward at predetermined height to
plant-pot
accommodation portion, to illuminate set plant
pot

PATENT-ASSIGNEE: ITO T[ITOTI]

PRIORITY-DATA: 2000JP-0288684 (September 22, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES MAIN-IPC		
JP 2002100208 A	April 5, 2002	N/A
006 F21S 008/08		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP2002100208A	N/A	2000JP-0288684
September 22, 2000		

INT-CL (IPC): A01G009/00, A01G009/02, A01G027/00, F21S008/08, F21W131:109

ABSTRACTED-PUB-NO: JP2002100208A

BASIC-ABSTRACT:

NOVELTY - The outdoor lamp has a plant-pot accommodation portion (3) provided to the upper section of a water storage (1). A luminaire (4) is arranged to the upper side of the water storage and installed upward at a predetermined height to the plant-pot accommodation portion via a connection fixture (5). A plant pot (2) in the plant-pot accommodation portion is illuminated from the

light of the luminaire.

USE - Outdoor lamp e.g. street lamp, garden lamp.

ADVANTAGE - Improves fine view of a street or garden during at night, due to illumination of plants in pot. Enables preventing frost withering of flowers or plants during winter, since flowers or plants are heated by illumination light from luminaire.

DESCRIPTION OF DRAWING(S) - The figure shows the vertical front view of principal component of outdoor lamp.

Water storage 1

Plant pot 2

Plant-pot accommodation portion 3

Luminaire 4

Connection fixture 5

CHOSEN-DRAWING: Dwg.2/9

TITLE-TERMS: OUTDOOR LAMP STREET LAMP GARDEN LAMP LUMINAIRE ARRANGE
TOP SIDE

WATER STORAGE INSTALLATION UP PREDETERMINED HEIGHT PLANT
POT

ACCOMMODATE PORTION ILLUMINATE SET PLANT POT

DERWENT-CLASS: P13 Q71 W04 X26

EPI-CODES: W04-X03C; X26-M; X26-X;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2002-367754

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2002-100208

(P2002-100208A)

(43) 公開日 平成14年4月5日 (2002.4.5)

(51) Int.Cl. ⁷	識別記号	F I	ターム(参考)
F 2 1 S 8/08		A 0 1 G 9/00	F 2 B 0 2 7
A 0 1 G 9/00		9/02	E
9/02			1 0 1 W
	1 0 1	F 2 1 W 131:109	
27/00		F 2 1 S 1/10	R

審査請求 有 請求項の数 2 OL (全 6 頁) 最終頁に続く

(21) 出願番号 特願2000-288684(P2000-288684)

(22) 出願日 平成12年9月22日 (2000.9.22)

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Fターム(参考) 2B027 NA10 ND01 NE01 TA03 TA08

TA10 TA19 UA04 UA09 UA22

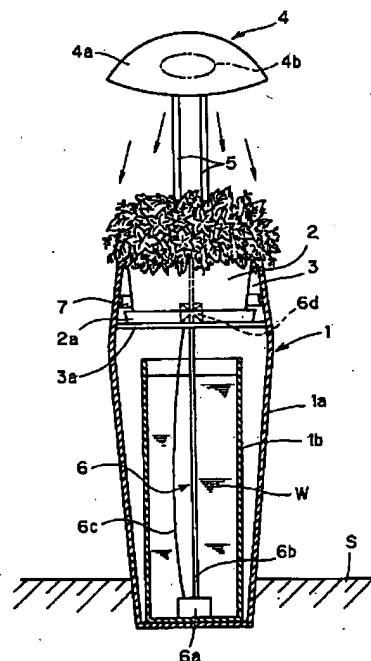
UA28 UB03 UB09

(54) 【発明の名称】 屋外灯

(57) 【要約】

【課題】 屋外灯本来の機能のみでなく、夜間における街路や庭園の美観を向上できる屋外灯を提供すること。

【解決手段】 この屋外灯は、上部に花鉢2の收容部3を備えた灌水用の貯水部1と、該貯水部1の上方に配設される照明器具4と、該貯水部1と照明器具4を十分な間隔を保って接続固定する長目の接続固定部材5とから構成されており、上記貯水部1と照明器具4との間の十分な間隔により、照明された花鉢2を明瞭に表見可能に構成されている。



【特許請求の範囲】

【請求項1】 街灯、庭園灯などの屋外灯であって、上部に花鉢の収容部を備えた灌水用の貯水部と、該貯水部の上方に配設される照明器具と、該貯水部と照明器具を十分な間隔を保って接続固定する長目の接続固定部材とから構成されており、上記貯水部と照明器具との間の十分な間隔により、照明された花鉢を明瞭に表見可能に構成したことを特徴とする屋外灯。

【請求項2】 花鉢の収容部内に花鉢を暖める発熱体を設けて構成した請求項1に記載の屋外灯。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、街灯、庭園灯などの屋外灯の改良に関し、夜間に街路や庭園を単に照明するだけではなく、その照明効果に加えて、夜間の街や庭園の美観を著しく向上し得る屋外灯に関する。

【0002】

【従来の技術】従来、街灯、庭園灯などの屋外灯は、街路や庭園を照明して夜間における街路の状態の明瞭化を図ると共に、街や庭などの家屋周辺の安全化を図るといった重要な役目を担っており、日常生活を送るうえで欠くことができない存在であることは言うまでもない。

【0003】

【発明が解決しようとする課題】本発明は、上記屋外灯本来の機能のみでなく、これに加えて、夜間における街路や庭園の美観を著しく向上できる等の特長を備えた屋外灯を提供することを主要な課題として開発されたものである。

【0004】

【課題を解決するための手段】上記の課題を解決するために本発明は、街灯、庭園灯などの屋外灯であって、上部に花鉢の収容部を備えた灌水用の貯水部と、該貯水部の上方に配設される照明器具と、該貯水部と照明器具を十分な間隔を保って接続固定する長目の接続固定部材とから構成されており、上記貯水部と照明器具との間の十分な間隔により、照明された花鉢の花を明瞭に表見可能に構成したことを特徴とする屋外灯を提供するものである。

【0005】また、本発明は、上記のように構成した屋外灯において、花鉢の収容部内に花鉢を暖める発熱体を設けた屋外灯を提供するものである。

【0006】

【発明の実施の形態】以下に、本発明の実施の形態を添付図面に基いて説明すれば、図1～図3は本発明に係る屋外灯の第1の実施の形態を示しており、灌水用の貯水部1と、花鉢を植込んだ花鉢2と、該花鉢2の収容部3と、貯水部1の上方に配設される照明器具4と、貯水部1と照明器具4を接続固定する接続固定部材5と、花鉢2の灌水具6と、花鉢2を外部から暖める発熱体7とから構成されている。

【0007】而して、上記貯水部1は、この実施の形態では、上部を開口したボックス状の外枠1aと、この外枠1a内に収容した貯水タンク1bとから構成されており、この貯水タンク1bは外枠1aよりも短寸法に形成されており、外枠1a内に貯水タンク1bを収容した際に、外枠1aの上部内側に前記花鉢2の収容部3を形成するためのスペースが設けられている。

【0008】また、上記花鉢2の収容部3は、外枠1aの上部内側に固設された支持板3aを備えており、この支持板3a上に水受皿2aを介して花鉢2を載置するものである。

【0009】さらに、上記照明器具4は、笠状の反射板4aの内面に照明灯4bを取付けて構成されており、この実施の形態では、基端部を溶接手段、ボルト・ナット締め手段などの適宜の手段により、上記外枠1aの上部内側に縦に並列させて固設した長目の2本のバー状の接続固定部材5、5の上端部に上記照明器具4の反射板4aの周縁が取付けられていて、花鉢2の収容部3の真上に照明器具4が位置するように配設され、且つ長目の接続固定部材5、5により、貯水部1を含めて花鉢2との間に十分な間隔を保って配設されている。

【0010】また、灌水具6は、貯水タンク1b内に配設した水中ポンプ6aと、灌水用チューブ6bと、電線6cと、花鉢2の収容部3内に設けたタイマー付きコントローラー6dとから構成されており、灌水用チューブ6bの下端部を水中ポンプ6aに連通すると共に、その上端部を花鉢2の上面に臨ませ、且つ電線6cの下端部を水中ポンプ6aの駆動モーター（図示せず）に接続すると共に、その上端部をコントローラー6dに接続してコントローラー6dの作用により、所要の時間間隔ごとに水中ポンプ6aを作動して花鉢2に灌水するように構成されている。

【0011】次に、上記発熱体7は、この実施の形態では、図7及び図8に略示するように、2本の接続端子7a、7aを備えたテープ状の自己制御型発熱体（P.T.C.）7bで構成されており、その周面をメッシュ状の薄鋼板7cで被覆保護したものを、花鉢2の収容部3内即ち、貯水部1の外枠1aの上部内面に周設し、接続端子7a、7aに通電することにより、該発熱体7からの発熱によって花鉢2の培養土の周辺を適温で温めるように構成されている。なお、この発熱体7には、上記自己制御型発熱体7bに代えてセラミックヒーター、ニクロム線などを適宜に使用できるものである。

【0012】また、前記照明器具4は図示していないが、太陽光線の受光量をセンサーにより検出して、受光量が設定値以下に低減すると自動的に点灯し、受光量が設定値以上に増加すると自動的に消灯する自動点灯、消灯制御機構を備えているものである。

【0013】次に、上記のように構成した第1の実施の形態の使用状態を作用、効果と共に説明すれば、図1～

図3に示すように、屋外灯を構成している貯水タンク1bに水Wを収容し、支持板3a上に花鉢2を載置した外枠1aの下方部を街路Sに埋め込んで屋外灯が倒れないように立設する。

【0014】日が暮れて屋外灯の周辺が暗くなり、照明器具4の自動点灯、消灯制御機構の受光量が低減して設定値以下になると、センサーの作用により照明灯4bにスイッチが入って自動点灯し、照明器具4の反射板4aにより反射された光線は、照明器具4の直下に配置されている花鉢2の花を照明して美しい「花灯かり」を出現させ、夜の街路の美観を著しく向上できる。

【0015】上記の美しい「花灯かり」は、照明器具4が花鉢2から十分な間隔を保って配置されていて、全方位的に明瞭に表見できるので、上記の効果は一層向上される。

【0016】また、照明器具4により、夜間を通して照明された花は、その花芽の開花が著しく促進されるものであり、特に日照時間が短い9月から翌年の3月の間の開花促進効果は顕著であると共に、厳寒夜における花の凍結防止にも役立ち得る。

【0017】さらに、花鉢2は照明器具4の反射板4aの直下に配置されているので、その反射板4aにより冬期における霜除け効果があつて、霜枯れを防止できると共に、雨除け効果があつて、激しい雨や梅雨期の長雨による花びらのいたみを防止できる。

【0018】また、花鉢2の収容部3内に周設した自己制御型発熱体7bにより花鉢2を周側から加熱して、花鉢2内の培養土を暖め、花の根部を暖めることができるので、上記した照明器具4による加温効果と相俟つて、分化した花芽を成長させ、開花を一層促進できるものであり、特に寒気にさらされる冬期の際の、花の根部を暖める効果は大きく、低温外気の中で開花した花は自然温度条件下で咲くものより花もちがよく、長期間に亘つて美しい状態で咲き続ける効果がある。この自己制御型発熱体7bはメッシュ状の薄鋼板7cで被覆保護されているので、損傷するおそれがなく且つメッシュ部分から熱を確実に放出して花鉢2を加熱できる。

【0019】さらに、貯水タンク1b内に配設した水中ポンプ6aと、灌水用チューブ6bと、電線6cと、花鉢2の収容部3内に設けたタイマー付きコントローラー6dとから構成された公知の灌水具6により花に適時に灌水できるものである。

【0020】次に、図4～図6は本発明に係る屋外灯の第2の実施の形態を示しており、上記第1の実施の形態との主要な構成上の相違は、貯水部1を貯水タンク1bのみで構成し、該貯水タンク1bの上方の空間スペースにより支持板3aを介して花鉢2の収容部3を構成すると共に、貯水タンク1bの上部内側面に発熱体7を周設(図9に明示)した点と、図5に示すように、収容部3に2個の花鉢2、2を対向配置すると共に、照明器具4

の中央部に1本の長いバー状の接続固定部材(支持体)5を取付け、該接続固定部材5の下端を、支持板3aを貫通させて貯水タンク1bの底面中央部に配設した固定用ブロック8に固設し、貯水部1と照明具4を接続固定した点と、貯水タンク1bに水の補給口1cを設けた点で相違しており、その他の構成は第1の実施の形態と略々同一であるから、同一部分には同一符号を付すと共に、同一部分の説明は省略してある。

【0021】また、上記のように構成した第2の実施の形態の使用状態及び作用、効果も殆んど第1の実施の形態で詳述した内容と相違しないので、その説明は省略するが、この実施の形態では、外枠1aを用いていないので軽量且つ経済的であると共に、照明器具4の中央部を1本のバー状の接続固定部材5で支持させたので、照明器具4を安定支持でき且つ花鉢2の真上に容易に配設できる利点がある。

【0022】以上、本発明の主要な実施の形態について説明したが、本発明は、上記の実施の形態のみに限定されるものではなく、発明の目的を達成でき、且つ発明の要旨を逸脱しない範囲内で種々の設計変更が可能であつて、これらの設計変更も全て本発明の特許請求の範囲に包含されるものである。

【0023】

【発明の効果】請求項1に記載した本発明の屋外灯は、街灯、庭園灯などの屋外灯であつて、上部に花鉢の収容部を備えた灌水用の貯水部と、該貯水部の上方に配設される照明器具と、該貯水部と照明器具を十分な間隔を保つて接続固定する長目の接続固定部材とから構成されており、上記貯水部と照明器具との間の十分な間隔により、照明された花鉢の花を明瞭に表見可能に構成されており、上記のようにして使用されるものであるから、次の優れた諸効果を奏する。

【0024】照明器具が点灯されると、その下に配置されている花鉢を明るく照明して、美しい「花灯かり」を出現させるので、本来の屋外灯の効果に加えて、夜の街路や庭園の美観を著しく向上できる。

【0025】上記の美しい「花灯かり」は、照明器具が貯水部及び花鉢から十分な間隔を保つて配置されていて、全方位的に明瞭に表見できるので、上記の効果を一層向上できる。

【0026】照明器具により夜間を通して照明された花は、その花芽の開花が著しく促進され、特に日照時間が短かい時期の開花促進効果は顕著であると共に、照明温度により厳寒夜における花の凍結を防止できる。

【0027】照明器具の下に配置されている花鉢の花は、照明器具により冬期における霜枯れが防止され、また、激しい雨や長雨による花びらのいたみが防止される。

【0028】請求項2に記載した本発明の屋外灯は、請求項1の構成に加えて、花鉢の収容部内に発熱体を設け

て構成されているので、上記請求項1の効果に加えて、その発熱体により花鉢を周側から加熱して、花鉢内の培養土を暖め、花の根部を暖めることができるので、上記の照明器具による加温効果と相俟って、分化した花芽を成長させて開花を一層促進でき、特に寒気にさらされる冬期の際の、花の根部を暖める効果は大きく、低温外気の中で開花した花は自然温度条件下で咲くものより花もちがよく、長期間に亘って美しい状態で咲き続ける効果がある。

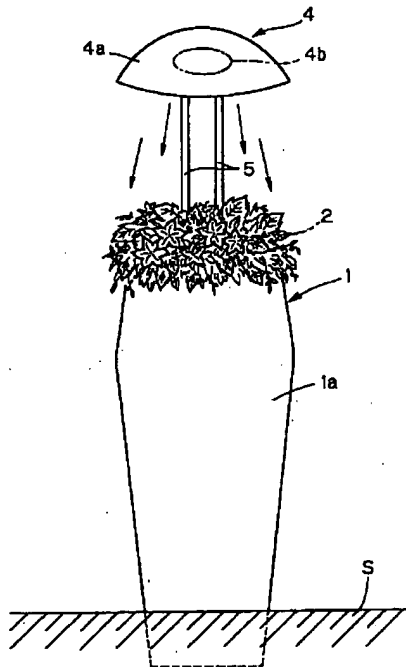
【図面の簡単な説明】

- 【図1】本発明の第1の実施の形態を示す正面図である。
- 【図2】その要部の縦断正面図である。
- 【図3】その要部の縦断側面図である。
- 【図4】本発明の第2の実施の形態を示す1部省略正面図である。
- 【図5】図4のA-A線における横断拡大平面図である。
- 【図6】花株を植込んだ状態における要部の縦断正面図である。
- 【図7】発熱体の一例を示す簡略斜視図である。
- 【図8】周囲をメッシュ状の薄鋼板で被覆保護した発熱体の拡大断面図である。
- 【図9】発熱体の装設状態を示す1部省略縦断正面図である。

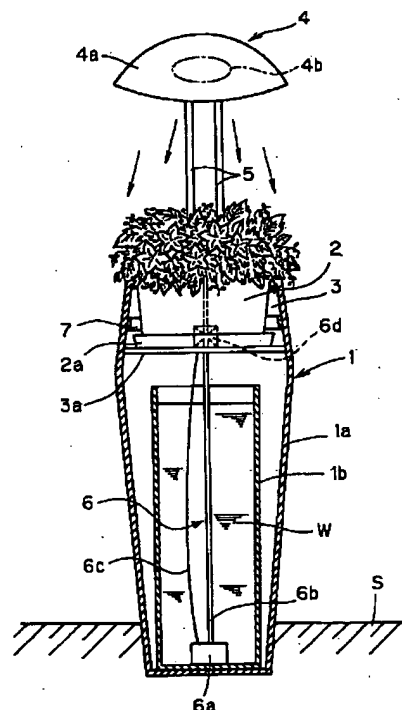
【符号の説明】

- 1 貯水部
- 1 a 外枠
- 1 b 貯水タンク
- 1 c 水の補給口
- 2 花鉢
- 2 a 水受皿
- 3 花鉢の收容部
- 3 a 支持板
- 10 4 照明器具
- 4 a 反射板
- 4 b 照明灯
- 5 接続固定部材
- 6 灌水具
- 6 a 水中ポンプ
- 6 b 灌水用チューブ
- 6 c 電線
- 6 d コントローラー
- 7 発熱体
- 20 7 a 接続端子
- 7 b 自己制御型発熱体
- 7 c メッシュ状の薄鋼板
- 8 固定用ブロック
- W 水
- S 街路

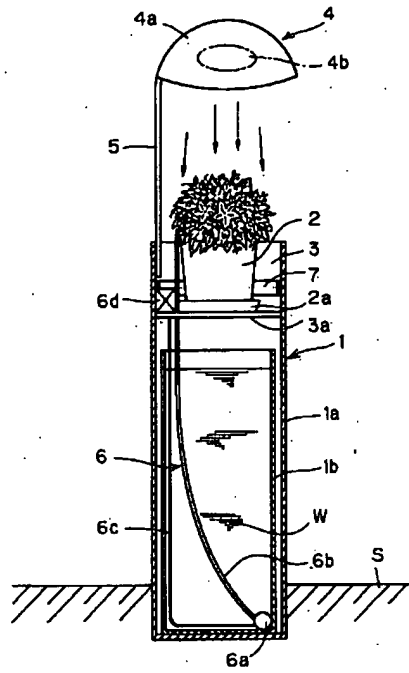
【図1】



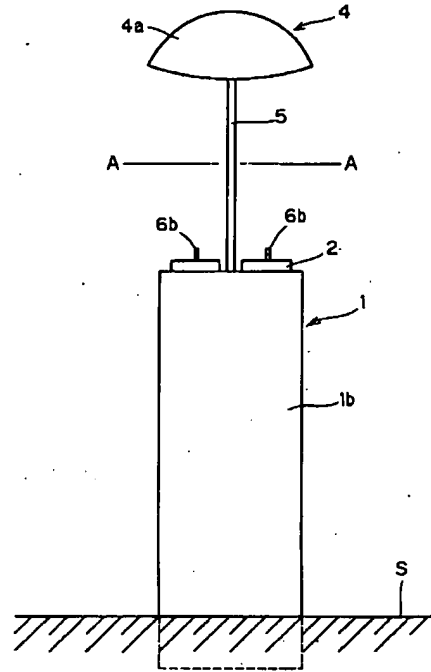
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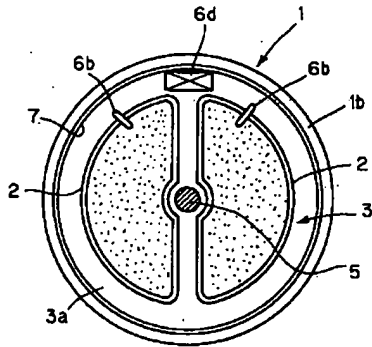
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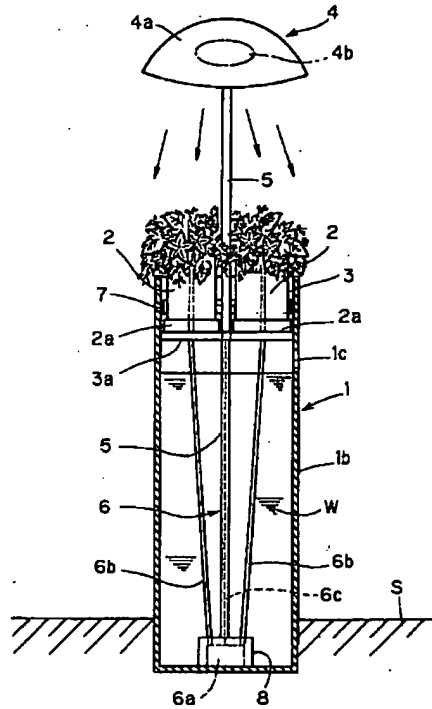
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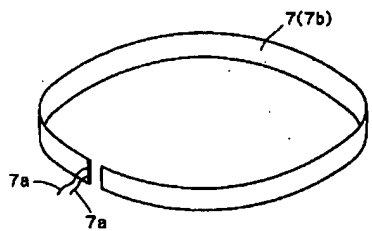
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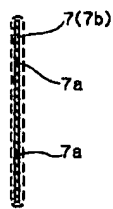
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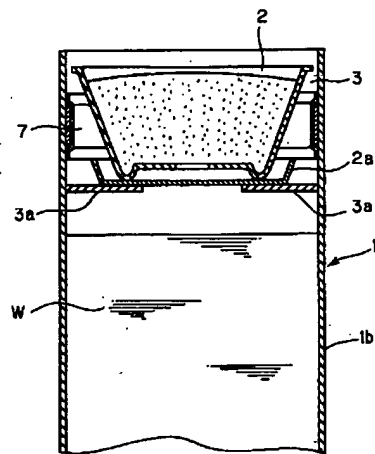
【図7】



【図8】



【図9】



フロントページの続き

(51)Int. Cl.⁷
// F 21 W 131:109

識別記号

F I
A 01 G 27/00

テーマコード(参考)

502L
505F

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the open-air lamp which it not only illuminates a street and a garden, but may improve the town of Nighttime, and the fine sight of a garden remarkably at Nighttime in addition to the light effect about amelioration of open-air lamps, such as a streetlight and a garden LGT.

[0002]

[Description of the Prior Art] Conventionally, it cannot be overemphasized that it is an existence indispensable when open-air lamps, such as a streetlight and a garden LGT, are bearing the important duty of attaining safing around a house, such as a town and a yard, while illuminating a street and a garden and attaining clear-ization of the condition of the street in Nighttime and you lead everyday life.

[0003]

[Problem(s) to be Solved by the Invention] This invention is developed considering offering the open-air lamp equipped with the features of being able to improve remarkably the fine sight of not only the function of above-mentioned open-air lamp original but the street in Nighttime, or a garden as main technical problems.

[0004]

[Means for Solving the Problem] The storage-of-water section for sprinkling of water which this inventions are open-air lamps, such as a streetlight and a garden LGT, in order to solve the above-mentioned technical problem, and equipped the upper part with the hold section of a flowerpot, Lighting fitting arranged above this storage-of-water section, and this storage-of-water section and lighting fitting are constituted from a connection holddown member of the long eye which maintains and carries out connection immobilization in sufficient spacing. With sufficient spacing between the above-mentioned storage-of-water section and lighting fitting The open-air lamp characterized by having seen and constituting possible is clearly offered for the flower of the illuminated flowerpot a table.

[0005] Moreover, this invention offers the open-air lamp which prepared the heating element with which a flowerpot is heated to the hold circles of a flowerpot in the open-air lamp constituted as mentioned above.

[0006]

[Embodiment of the Invention] If the gestalt of operation of this invention is explained below based on an accompanying drawing, drawing 1 - drawing 3 show the gestalt of operation of the 1st of the open-air lamp concerning this invention. The storage-of-water section 1 for sprinkling of water, It consists of a connection holddown member 5 which carries out connection immobilization of the flowerpot 2 in which **** was planted, the hold section 3 of this flowerpot 2, the lighting fitting 4 arranged above the storage-of-water section 1, and the storage-of-water section 1 and lighting fitting 4, a sprinkling-of-water implement 6 of a flowerpot 2, and a heating element 7 with which a flowerpot 2 is heated from the outside.

[0007] It **. The above-mentioned storage-of-water section 1 with the gestalt of this operation It consists of outer frame 1a of the shape of a box which carried out opening of the upper part, and flush tank 1b held in this outer frame 1a. When this flush tank 1b is formed in the short dimension rather than outer frame 1a and flush tank 1b is held in outer frame 1a, the tooth space for forming the hold section 3 of said flowerpot 2 inside [up] outer frame 1a is provided.

[0008] Moreover, the hold section 3 of the above-mentioned flowerpot 2 is equipped with support plate 3a fixed inside [up] outer frame 1a, and lays a flowerpot 2 through water saucer 2a on this support plate 3a.

[0009] The above-mentioned lighting fitting 4 attaches floodlight 4b in the inside of bamboo hat-like reflecting plate 4a, and is constituted. Furthermore, with the gestalt of this operation The end face section with the means by which a welding means, a bolt nut bundle means, etc. are proper The periphery of reflecting plate 4a of the above-mentioned lighting fitting 4 is attached in the upper limit section of the connection holddown members 5 and 5 of the two shape of a bar of the long eye which was made to arrange in parallel perpendicularly inside [up] the above-mentioned outer frame 1a, and was fixed to it. It is arranged so that lighting fitting 4 may be located right above the hold section 3 of a flowerpot 2, and including the storage-of-water section 1, spacing sufficient between flowerpots 2 is maintained and it is arranged by the connection holddown members 5 and 5 of a long eye.

[0010] Moreover, submersible-pump 6a which arranged the sprinkling-of-water implement 6 in flush tank 1b, While consisting of tube 6b for sprinkling of water, electric-wire 6c, and controller 6d with a timer prepared in the hold section 3 of a flowerpot 2 and opening the lower limit section of tube 6b for sprinkling of water for free passage to submersible-pump 6a While making the top face of a flowerpot 2 face an edge moreover and connecting the lower limit section of electric-wire 6c to the drive motor (not shown) of submersible-pump 6a Moreover an edge is connected to controller 6d, and it is constituted so that it may operate and may sprinkle water on submersible-pump 6a to a flowerpot 2 for every necessary time interval according to an operation of controller 6d.

[0011] The above-mentioned heating element 7 next, with the gestalt of this operation It consists of autogenous regulation mold heating element (P. T.C.) 7b of the shape of a tape equipped with two connection terminals 7a and 7a so that it may sketch in drawing 7 and drawing 8 . By attaching around the inside of the hold section 3 of a flowerpot 2, i.e., the up inside of outer frame 1a of the

storage-of-water section 1, what carried out covering protection of the peripheral surface by mesh-like sheet steel 7c, and energizing it for the connection terminals 7a and 7a, it is constituted so that the circumference of the compost of a flowerpot 2 may be warmed by optimal temperature by generation of heat from this heating element 7. In addition, it replaces with the above-mentioned autogenous regulation mold heating element 7b, and a ceramic heater, a nichrome wire, etc. can be suitably used for this heating element 7.

[0012] Moreover, although said lighting fitting 4 is not illustrated, when the sensor detected the light income of sunrays and light income decreased below to the set point, the light was switched on automatically, and if light income increases beyond the set point, it has automatic lighting and the putting-out-lights controlling mechanism which are switched off automatically.

[0013] Next, it sets up so that Water W may be held in flush tank 1b which was constituted as mentioned above and which constitutes the open-air lamp as it is shown in drawing 1 - drawing 3 , if the busy condition of the gestalt of the 1st operation is explained with an operation and effectiveness, the lower part section of outer frame 1a which laid the flowerpot 2 on support plate 3a may be embedded in Street S and an open-air lamp may not fall.

[0014] If it grows dark and the circumference of an open-air lamp becomes dark, and automatic lighting of lighting fitting 4 and the light income of a putting-out-lights controlling mechanism decrease and it becomes below the set point The beam of light which floodlight 4b was turned on with an operation of a sensor, carried out automatic lighting, and was reflected by reflecting plate 4a of lighting fitting 4 illuminates the flower of the flowerpot 2 arranged directly under lighting fitting 4, makes beautiful "**** loan" appear, and can improve the fine sight of the street of night remarkably.

[0015] Since lighting fitting 4 maintains, is arranged, table-looks at sufficient spacing clearly in omnidirection and can do it from a flowerpot 2, the above-mentioned effectiveness of the beautiful loan [above-mentioned / "**** loan"] improves further.

[0016] Moreover, the bloom of the flower bud is promoted remarkably, and from September when especially daylight hours are short, the bloom facilitatory effect of the next year during March can be useful [as for the flower illuminated through Nighttime with lighting fitting 4] also to the anti-freeze of the flower in intense-cold night while it is remarkable.

[0017] Furthermore, since the flowerpot 2 is arranged directly under reflecting plate 4a of lighting fitting 4, while there is the ***** effectiveness in winter by the reflecting plate 4a and being able to prevent a frostbite, there is the rain-cover effectiveness and the pain of the petal by the long rain of an intense rain and rainy season term can be prevented.

[0018] Moreover, since a flowerpot 2 can be heated from a periphery side by autogenous regulation mold heating element 7b attached in the hold section 3 of a flowerpot 2, the compost in a flowerpot 2 can be warmed and the root of a flower can be warmed Effectiveness and the flower bud which specialized conjointly are grown up. warming by the above-mentioned lighting fitting 4 -- The effectiveness of warming the root of a flower in the case of the winter which can

promote the bloom further and is exposed especially to the cold is large, and from some in which the flower which bloomed in the low-temperature open air blooms under natural temperature conditions, flower rice cake is good and it is effective in continuing at a long period of time and continuing blooming in the beautiful condition. Since covering protection is carried out by mesh-like sheet steel 7c, this autogenous regulation mold heating element 7b does not have a possibility that it may be damaged, and emits heat certainly from a mesh part, and can heat **** 2.

[0019] Furthermore, it can sprinkle water to a flower timely with the well-known sprinkling-of-water implement 6 which consisted of submersible-pump 6a arranged in flush tank 1b, tube 6b for sprinkling of water, electric-wire 6c, and controller 6d with a timer prepared in the hold section 3 of a flowerpot 2.

[0020] Drawing 4 - drawing 6 show the gestalt of operation of the 2nd of the open-air lamp concerning this invention. Next, the difference in main configurations with the gestalt of implementation of the above 1st While the storage-of-water section 1 is constituted only from flush tank 1b and the upper space tooth space of this flush tank 1b constitutes the hold section 3 of a flowerpot 2 through support plate 3a As it is indicated in drawing 5 as the point which attached the heating element 7 around the up medial surface of flush tank 1b (it shows clearly in drawing 9), while carrying out opposite arrangement of the two flowerpots 2 and 2 at the hold section 3 The connection holddown member (base material) 5 of the one shape of a long bar is attached in the center section of the luminaire 4. The point which fixed to the block 8 for immobilization which was made to penetrate support plate 3a and arranged the lower limit of this connection holddown member 5 in the base center section of flush tank 1b; and carried out connection immobilization of the storage-of-water section 1 and the lighting implement 4, Since other configurations are the gestalten and **** identities of the 1st operation, while it is different in that opening 1c of water was prepared in flush tank 1b, and they give the same sign to the same part, explanation of the same part is omitted.

[0021] Moreover, although the explanation is omitted since the busy condition of the gestalt of the 2nd operation and an operation, and effectiveness are not different from the contents which were constituted as mentioned above and which were explained in full detail with the gestalt of operation of ***** 1st, either With the gestalt of this operation, since the center section of the luminaire 4 was made to support by the connection holddown member 5 of the shape of one bar while it was lightweight and economical, since outer frame 1a was not used, the stable support of the luminaire 4 can be carried out, and there is an advantage which can be easily arranged right above a flowerpot 2.

[0022] As mentioned above, although the gestalt of main operations of this invention was explained, design changes various by within the limits which is not limited only to the gestalt of the above-mentioned operation, and can attain the purpose of invention, and does not deviate from the summary of invention are possible for this invention, and all also of these design changes are included by the claim of this invention.

[0023]

[Effect of the Invention] The storage-of-water section for sprinkling of water which the open-air lamps of this invention indicated to claim 1 are open-air lamps, such as a streetlight and a garden LGT, and equipped the upper part with the hold section of a flowerpot, Lighting fitting arranged above this storage-of-water section, and this storage-of-water section and lighting fitting are constituted from a connection holddown member of the long eye which maintains and carries out connection immobilization in sufficient spacing. With sufficient spacing between the above-mentioned storage-of-water section and lighting fitting The flower of the illuminated flowerpot is seen a table clearly and it is constituted possible, and since it is a use **** thing as mentioned above, many effectiveness which was excellent in the degree is done so.

[0024] Since the flowerpot arranged under it is illuminated brightly and beautiful ***** loan" is made to appear when lighting fitting is turned on, in addition to the effectiveness of an original open-air lamp, the street of night and the fine sight of a garden can be improved remarkably.

[0025] Since lighting fitting maintains, is arranged, table-looks at sufficient spacing clearly in omnidirection and can do it from the storage-of-water section and a flowerpot, the above-mentioned beautiful ***** loan" can improve the above-mentioned effectiveness further.

[0026] As for the flower illuminated through Nighttime with lighting fitting, the bloom of the flower bud is promoted remarkably, and while especially the bloom facilitatory effect of a short paddle stage has remarkable daylight hours, freezing of the flower in intense-cold night can be prevented with lighting temperature.

[0027] The frostbite in winter is prevented by lighting fitting, and, as for the flower of the flowerpot arranged under lighting fitting, the pain of the petal by intense rain and an intense long rain is prevented.

[0028] Since in addition to the configuration of claim 1 the open-air lamp of this invention indicated to claim 2 prepares a heating element in the hold circles of a flowerpot and is constituted Since in addition to the effectiveness of above-mentioned claim 1 a flowerpot can be heated from a periphery side with the heating element, the compost in a flowerpot can be warmed and the root of a flower can be warmed Effectiveness and the flower bud which specialized conjointly are grown up, and the bloom can be promoted further. warming by the above-mentioned lighting fitting -- The effectiveness of warming the root of a flower in the case of the winter exposed especially to the cold is large, and from some which bloom under natural temperature conditions, the flower which bloomed in the low-temperature open air has good flower rice cake, and is effective in continuing at a long period of time and continuing blooming in the beautiful condition.

[Translation done.]